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Does Ethnicity Affect the Coping of Military Spouses?

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This article presents results of an exploratory study of how Army military spouses with children cope with everyday stresses varies based on ethnic background. The study used data from 4,464 respondents of the 2001 Survey of Army Families IV (SAF IV). SAF IV, fielded April through July 2001, was used to reduce the confounding associated with the Iraq war. The results of five-stepwise regressions indicated that there were four common predictors and four ethnically specific predictors of how spouses cope. It was also found that the major sample (Caucasian) was most reflective of the analysis of the total sample of 4,464. Two of the primary predictors of spouse coping were the Problems Experienced Scale and the spouses' ability to keep themselves well informed about the Army. Study findings suggest that while similarities in coping exist between ethnic groups, there are also important ethnic differences in coping relevant to family policy and practice. These differences warrant further study based on a larger sample of spouses.

Keywords: *ethnicity; coping; military families; stress*

During the past twenty years, extensive research has been conducted by both military and civilian researchers on the association between military family factors and their impact on soldier readiness and retention in the military. Research efforts have focused on multiple factors in an attempt to understand military families' adaptation to the military way of life and the stress associated with it. There has been little research on how ethnicity might impact this adaptation. There is ample evidence that ethnic values and identifications play a significant role in civilian families.[1] For example, ethnic values of some cultural groups greatly influence the extent to which families stay together during difficult circumstances.[2] With other groups, ethnic values determine the extent to which family members are loyal to one another[3] or feel responsible to those informally adopted into the African American family system.[4]

This article presents the results of an exploratory study that explored how the ethnicity (Caucasian, African American, or Hispanic) of a female Army spouse who has children might be an intervening variable in how she copes with everyday stresses and how this intervening role might vary based on other variables such as age, educational level, marital satisfaction, parenting problems, financial problems, emotional problems, and social support.

The study examines data from 4,464 female[5] respondents to the 2001 Survey of Army Families (SAF) IV. Study findings suggest that while similarities in coping exist between ethnic groups, there were also important ethnic differences in how well they coped.

Background Literature

With approximately half of all enlisted soldiers and almost 70 percent of officers married,[6] Army families and their roles in soldier readiness and retention constitute an important area of study for the Army. The literature has shown how a variety of family factors, including emotional stress,[7-9] the ability of the family to adapt to the Army way of life,[10] and the spouse's support of a military career play a critical part in soldier readiness[11-13] and contribute to whether the soldier will remain in the Army.[14-16]

Family adaptation has been used as an outcome variable when researchers studied the family's impact on retention and soldier readiness.[17-20] As an outcome variable, adaptation is most often defined from an interactionist perspective, that is, the level of fit between the family and the military.[21] Segal[22] characterized a good fit in terms of a family who can balance the needs of the military as well as its own in terms of meeting the military family's mission and the physical and emotional needs of the family. From a military perspective, an adaptive family system supports the service member in achieving his or her military duties.[23]

Past research has shown that family adaptive/coping resources that help families deal with military and family stressors include the following: the individual's knowledge of the military; individual self-esteem and skills; and the family system's resources such as cohesion, family communication skills, and adaptability in family structure. Other adaptive resources are natural social support systems such as one's network of friends and extended family from which help can be obtained. Military policies and practices that are sensitive to the family and environmental needs of soldiers also are considered important adaptive resources.[24,25] When family resources balance the demands of the family with those of military life, family adaptation is optimal.

Various factors have been found to affect the military family adaptation process. These include adjustment to marital and family life, adjustment to Army life, the soldier's rank, demographics, life stage, formal and informal support groups, and perceived unit-level command support for the family. These factors positively or

negatively impact the adaptation process. For example, junior enlisted families have less money, fewer support groups, and less knowledge of the military than senior enlisted and officer families. This can negatively affect a junior enlisted family's adaptation to the military. Research supports this with findings indicating lower levels of junior enlisted spouse adaptation to the Army and junior enlisted spouses' viewing deployments as more stressful than do more senior spouses.[26,27] Junior enlisted spouses also are less likely to be knowledgeable about military family services, have had less time to develop the knowledge of how to deal with deployments, and are more likely to have financial problems that might draw the soldier away from his or her mission. Other studies found that families with more children and older children experience greater difficulty with relocation and lower adaptation to the Army. This may be due to lower flexibility and increased needs within the family.[28]

Ethnicity has also been found to affect the adaptation process. One study concluded that because of the significant and increasing number of ethnic minorities in the military, research involving these families takes on added importance in the total schema of research on resilient families.[29] McCubbin and McCubbin's 1988[30] research on military families in Europe found that African American soldiers and families call upon family unity and the sense of belonging to the neighborhood and military community to shape their adaptive response to military stress. The study found that the adaptation of Asians, American Indians, Chicanos, and Filipinos emphasized the importance of family time together, the military member's sense of how s/he fit in the military lifestyle, and the spouse's sense of control over the situation in which the family lived. Families of Caucasian background called upon a broader and more comprehensive set of individual, family, and community supports to assist in their adaptation to the military. Other researchers[31] studying civilian families have found clear evidence that "cultural processes" can (1) define and create specific sources of stress and distress, (2) shape the form and quality of illness experience, (3) influence the symptomatology of generalized distress and of specific syndromes, (4) determine the interpretation of symptoms and hence their subsequent cognitive and social impact, (5) provide specific modes of coping with distress, (6) guide help-seeking and the response to treatment, and (7) govern social responses to distress and disability.

Robert Hill in 2003[32] has written about the strengths of the African American family in the United States. He noted how the strong kinship network has been supportive of African Americans when they are in need of assistance. Hill reported that there is adaptability in the roles of the African American family and that this has resulted in lower suicide rates and fewer family desertions than in the Caucasian culture. He and others have found that the strong religious orientation of the African American culture has been instrumental in assisting African Americans in coping with slavery, racism, and segregation. Hill commented how the African American church was a major source of strength during the civil rights movement of the fifties and sixties. McGoldrick[33] characterized African American families as turning to religion as a solution to their problems before thinking of therapy. She also described

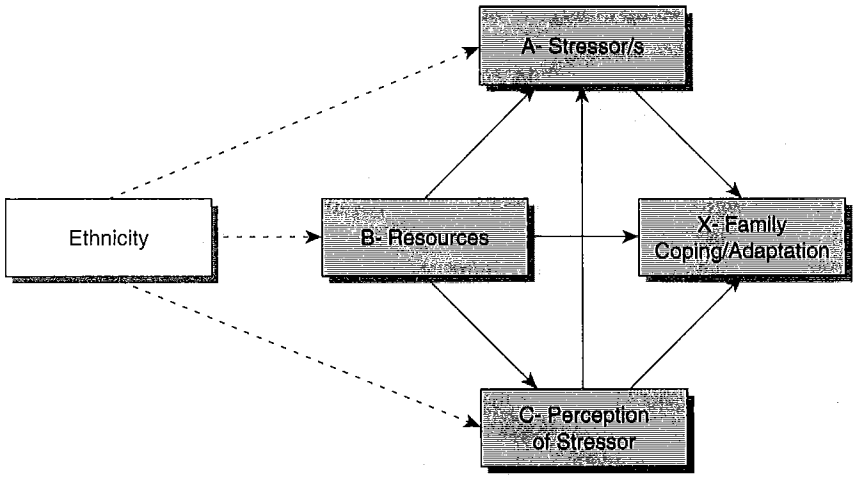
how "black families have traditionally lived much more embedded in a wide network of extended kin and community, a pattern that appears to be rooted in both the African American tradition of strong community and their slave history, which systematically broke up biological families and forced Blacks to turn to a wider network for support."[34] Lynch and Hanson[35] have summarized some differences in beliefs, values, and practices in the Latino (Hispanic) culture and mainstream American culture. They viewed white mainstream culture as tending to have an individual orientation, whereas the Latino culture has a collective orientation. They reported that the family structure of the Latino family tends to be patriarchal and that mainstream white culture tends toward a more democratic family structure. They also asserted that the extended family system plays a more important role in the Latino culture than in the mainstream culture, where the nuclear family system is more pronounced.

Various theoretical models of adaptation to the military have been developed, but few have included the role of ethnicity in this adaptation process. Multiple studies have used the ABCX model of family adaptation to study the military family's adaptation to Army life.[36,37] The "A factor" identifies family stressors that could be a potentially problematic event such as a deployment. The "B factor" refers to family resources or strengths such as money, knowledge, and formal and informal support that it uses to cope with stressors. The "C factor" is the meaning the family gives to the event collectively and individually. If the family views a deployment negatively, that will adversely impact their ability to adapt to the event. The A, B, and C factors interact together to create the "X factor." The X factor is how well the family copes/adapts to the stressor based on A, B, and C. The model places a strong emphasis on the availability and supportiveness of adaptive resources for meeting personal, family, and environmental needs as well as military stressors.[38]

Based on recent Army survey data, this study hypothesizes that ethnicity can be meaningfully incorporated into the ABCX theoretical model and, thereby, provide valuable supplementary data on how families adapt to stressors. Figure 1 depicts this incorporation. It is thought that the ethnicity of a family member will impact the stressors (A), the resources (B), and the meaning (C) that a family attributes to a stressful event such as a military deployment. For example, African American and Hispanic families may have the extended family as a resource (B) to help them during a deployment, whereas it is less likely that Caucasian families would have this resource. But families of color could have additional stressors (A) due to the continued prevalence of "racism" within the Army. Because of its greater reliance on community, the African American family may perceive (C) deployment more positively because they may view it as an opportunity to contribute the greater good of society. The positive role of religion in African American life may also serve as a resource (B).

Resilience theory also examines possible risk and protective factors that may affect an individual's or a family's predisposition to certain situations and the ability

Figure 1
Ethnicity, ABCX Model, Family Coping/Adaptation



to avoid or cope successfully with these situations.[39] Ethnicity may play a role regarding which protective and risk factors are included in the ABCX model. Individuals of color, particularly African American, Hispanic, and American Indian individuals, are disproportionately affected by poverty (risk factor).

Socioeconomic status (SES) has also been found to be a major predictor of coping styles for Mexican American families.[40] For these families, individuals of a higher SES have been found to engage in increased levels of internal focus coping such as processing the meaning of events, expressing emotions, and psychologically removing themselves from a situation. Individuals of lower SES are more likely to engage in increased levels of external focus coping such as using religion, social support, and engaging in problem solving with a partner.[41]

Social support has been consistently found to play a protective role in assisting an individual coping with stressful situations.[42] Social supports may be viewed in a variety of ways: for example, tangible help, guidance, and emotional support, or a coping mechanism such as seeking support.[43] McCubbin and McCubbin[44] found that social supports varied based on ethnicity. The previously noted literature points to additional social supports available to the African American and Hispanic family via their extended family.

Because of limited information on what ethnic factors mediate the military family's coping with stressors, there is a need to identify what ethnically specific risk and protective factors may serve as predictors of daily coping for individuals and

families. This exploratory study attempts to determine whether ethnicity has an intervening role in how factors such as age, marital satisfaction, financial problems, emotional problems, education, and social support lead to differences in how well Army spouses cope with the stresses of daily living. The hypothesis is that the variables listed above will differ in their impact on spouse coping based on ethnicity and that ethnicity is an intervening variable.

Methods

The U.S. Army periodically surveys Army spouses on their attitudes about the Army way of life, quality of life issues, stressors they encounter, and how well they are coping with the challenges of Army life. In addition, these surveys gather demographic information about the respondents such as their ethnicity, age, education, and so on. The current study is based on data from the SAF IV conducted immediately prior to 9/11, during April-July 2001, by the U.S. Army Community and Family Support Center in conjunction with the U.S. Army Research Institute for the Behavioral and Social Sciences. Since SAF IV was conducted prior to September 2001, the data were not confounded by variables such as wartime deployments that have occurred since then. SAF IV questionnaires were mailed to a stratified proportional sample of 20,000 civilian spouses of Active Component Army Soldiers worldwide. A total of 6,759 spouses returned completed surveys for a response rate of 33 percent. Survey results appear to be unbiased; the sampling error is plus or minus 1 percentage point.

Sample

Seventy-five percent of the SAF IV respondent spouses were Caucasian, 9.5 percent were African American, and 8.7 percent were Hispanic or of other races. Approximately 96.3 percent of the sample of Army spouses identified themselves as female, with a mean age of 34.5 years. Two-thirds reported their length of marriage as less than ten years; four-fifths were married to enlisted members and one-fifth to officers. More than 75 percent of the families had at least one child, and of those, 87.9 percent had children ages five and younger. SAF IV spouse data mirror the racial profile of the general Army population.[45] Overall, about two-thirds of the sample completed high school and/or some higher-education course(s), and nearly one-fourth had a bachelor's degree or higher level of education.[46]

In collecting information about the Army way of life and the quality of life for Army families, the 104 SAF IV questions asked spouses for their own opinions, not those of the soldiers. Hence, the results of the survey portray a day-to-day picture of family life in the Army as subjectively perceived by nonmilitary family members. Only civilian spouses of Army soldiers were eligible to participate in the survey because dual military married couples and single-parent soldiers might have significantly different issues. From the total SAF IV sample, 4,464 female spouses with children

were selected so as to be able to include the challenges of parenting in the study. The sample of male spouses was too small to be meaningfully studied and thus was not included in the study.

SAF IV is the latest in this series of mailed spouse surveys conducted by the Army since 1987. Results from the first three surveys were considered valuable measures of the needs and concerns of civilian families in the Army community. Based on survey findings, a number of programs including spouse education, family readiness groups, and child and youth services have changed significantly to better serve families.[47] An established pattern of consistency and relevance to target issues indicates a high degree of reliability in the SAF IV instrument.

Data Analysis and Instruments

A five-step process was used to analyze the data from the survey.

Step 1. A twelve-item daily coping scale (DCS) was developed that assessed how well spouses thought they were able to mange the following in the past 12 months:

1. Getting daily household tasks done
2. Obtaining needed transportation
3. Shopping
4. Handling financial matters
5. Arranging for childcare
6. Taking care of children at home
7. Disciplining and handling their children
8. Taking care of their child(ren)'s health
9. Taking care of their health
10. Handling their loneliness
11. Maintaining safety/security of their home
12. Spending time together as a family

The DCS had a reliability coefficient of .91. This scale was the dependent variable for this study. It was viewed as an estimate of how well the spouse was adapting to the demands of daily life and the military. Each item was a Likert question with subcategories that ranged from *managing very well* to *managing very poorly*. Lower scores indicated better functioning.

Step 2. Resiliency theory[48] and the previously noted ABCX model of adaptation suggest that there are family risk factors and protective factors that help one cope with the stressors of life. Based on these theories and past military family research, ten Likert items and four non-Likert items from the SAF IV questions were selected as independent variables. These variables are believed to have a positive or negative impact on daily coping based on the variable and the type of five-category Likert question used. The variables included the following:

1. I keep myself well informed about the Army (Likert: *strongly agree* to *strongly disagree*—Positive impact)[49]
2. The opportunities for me to achieve personal goals (Likert: *very serious problem* to *not a serious problem*—Negative impact)
3. Someone to listen to me at my current location (Likert: *no, sometime, always*—Negative impact)
4. The demands of the Army on family members (Likert: *very serious problem* to *not a serious problem*—Negative impact)
5. You and your spouse's satisfaction with your spouse's military job security/stability (Likert: *very satisfied* to *very dissatisfied*—Positive impact)
6. My spouse keeps me well informed about the Army (Likert: *strongly agree* to *strongly disagree*—Positive impact)
7. You and your spouse's satisfaction with the opportunity for your spouse to serve the country (Likert: *very satisfied* to *very dissatisfied*—Positive impact)
8. The Army's concern for the family (Likert: *very satisfied* to *very dissatisfied*—Positive impact)
9. Their and their spouse's satisfaction with their employment opportunities (Likert: *very satisfied* to *very dissatisfied*—Positive impact)
10. Their Army career intentions for their military spouse (Likert: four levels of desire—Positive impact)
11. Age (Negative impact)
12. Educational level (Negative impact)
13. Whether they attended a Family Resource Group in the past twelve months (yes or no—Positive impact)
14. The number of weeks the spouse had been deployed away from home in the past twelve months due to military duties (Positive impact)

Because the family literature suggests that risk factors such as marital problems, job-related problems, financial difficulties, and so on have an adverse impact on family functioning,[50] a five-item problem experienced scale (PES) was created from Likert questions in the survey instrument. The total score on the PES also became one of the independent variables. The PES measured the frequency that military spouses reported the following problems occurred in the past six months:

1. Job-related problems
2. Emotional or nervous problems
3. Marital problems
4. Financial problems
5. Parenting difficulty

This PES reliability coefficient was .72. The five items for the scale were Likert questions with five subcategories for each question. The subcategories ranged from *experiencing to a great extent* to *not at all.*

The last variable to be included as an independent variable was ethnicity of the spouse. Thus, the study used sixteen independent variables. They include the scores

on the fourteen items thought to have a positive or negative impact on adaptation, the score on the PES, and ethnicity.

Step 3. After the selection of the independent variables, all sixteen independent variables were analyzed individually to determine if they had a statistically significant correlation with the DCS. All were found to be statistically associated and were retained as potential independent variables for step 4.

Step 4. The statistical analysis of the results was completed in three phases. Initially, a stepwise regression was performed using fifteen independent variables. The fifteen independent variables (excluding ethnicity) were entered into the analysis to determine which variables would continue to be statistically significant when all had the possibility of being entered into the analysis.[51] Next, the sample was divided into three subsamples based on ethnicity: Caucasian (n = 1,933), African American (n = 251), and Hispanic (n = 211). Subsequently, three ethnically specific stepwise regressions were performed using the fifteen independent variables to determine whether daily coping varied based on ethnicity and the other fifteen independent variables.

Step 5. This consisted of a stepwise regression analysis of how the five items in the PES were statistically related to daily coping based on ethnicity. As in step 4, four samples were used: the aggregate sample of all spouses, the Caucasian spouses, African American spouses, and Hispanic spouses. Four separate exploratory stepwise regressions were performed to determine if the five items from the PES were statistically associated with daily coping differently based on ethnicity.

Results

Four common ethnic predictors and four ethnically specific predictors emerged from the four stepwise regressions. Table 1 summarizes the results from the exploratory stepwise regression models. Numbers in the columns indicate the step at which the variable entered the various regressions, and the percentages in parentheses next to the numbers indicate the percentage of variance accounted for by the variable when it entered the model. The step at which the variable entered into the regression and the percentage of variance accounted for are suggestive of the importance of the individual variables in predicting daily coping. Those entering into the regression model first and controlling for more of the variance in the DCS score are considered more important predictor variables. The PES scale entered the four regression models first in all situations and controlled for the largest percent of variance; thus, it is one of the primary predictors of daily coping for all ethnic groups.

Surprisingly, five variables found in previous research to be associated with military family adaptation were not found to be significant predictors of DCS scores.

Table 1
Results for Stepwise Regression for Variables Impacting Daily Coping Scale (DCS) for Aggregate Sample and Individual Ethnic Groups of Spouses with Children

Predictor Variable	Aggregate Sample (N = 2,650)	Caucasian Sample (n = 1,933)	African American Sample (n = 251)	Hispanic Sample (n = 211)
Problems Experienced Scale	1 (24.6)	1 (24.5)	1 (27.3)	1 (28.5)
I keep myself well informed about the Army	2 (4.6)	2 (4.0)	3 (3.8)	2 (10.2)
Someone to listen to me at my current location	3 (2.5)	3 (2.1)	4 (2.9)	4 (1.9)
The opportunities for me to achieve personal goals	4 (1.7)	4 (1.6)	n.s.	n.s.
You and your spouse's satisfaction with the opportunity for your spouse to serve the country	5 (0.8)	5 (0.4)	2 (7.3)	n.s.
The demands of the Army on family members	6 (0.5)	7 (0.1)	5 (2.5)	3 (4.4)
My spouse keeps me well informed about the Army	7 (0.2)	6 (0.2)	n.s.	n.s.
You and your spouse's satisfaction with your spouse's military job security/stability	8 (0.1)	n.s.	n.s.	5 (1.2)
The Army's concern for the family	9 (0.1)	n.s.	n.s.	n.s.
How would you feel if your spouse were to make the Army a career	10 (0.1)	n.s.	n.s.	n.s.
Their and their spouse's satisfaction with their employment opportunities	n.s.	n.s.	n.s.	n.s.
Age	n.s.	n.s.	n.s.	n.s.
Educational level	n.s.	n.s.	n.s.	n.s.
Whether they attended a Family Research Group in the past twelve months	n.s.	n.s.	n.s.	n.s.
The number of weeks the spouse had been deployed away from home in the past twelve months due to military duties	n.s.	n.s.	n.s.	n.s.

Note: n.s. = nonsignificant. Numbers indicate the step the variable entered the stepwise regression. Numbers in parentheses are the percentages of variance in DCS scores accounted for by the variables in stepwise regression.

These variables were age of the spouse, educational level, employment opportunities, attending a Family Readiness Group in the past twelve months, and the number of weeks the soldier had been deployed during the past twelve months. It is unclear why this occurred. One possibility is that either this study included variables that have shared variance with these variables or ethnicity has eliminated them in its role

as an intervening variable. Another possibility is that their elimination was due to this study's use of a different dependent variable as compared to other studies that also included these five variables.

As can be seen from Table 1, the Caucasian sample is most reflective of the findings for the aggregate sample. This is probably because it constitutes 75 percent of the aggregate sample. Thus, as suggested in the introduction of this article, unless separate analyses are conducted on specific ethnic groups, the majority ethnic sample will dominate the findings and one cannot determine if ethnic groups with lower sample sizes have uniquely different predictors of coping.

Below is a summary of the common predictors for all ethnic groups and the ethnically specific predictors.

Common predictors of DCS scores for all ethnic groups:

1. PES: the higher the number of problems reported, the lower the daily functioning.
2. The spouse keeping herself informed about the Army: the better a spouse keeps herself informed on the Army, the better the daily coping.
3. Someone to listen to me at my current location: the more likely someone has someone to listen to them at their current location, the higher their daily coping.
4. The demands of the Army on families: the greater the demands the Army places on the families, the lower their daily coping score.

Ethnically specific predictors:

1. Caucasian: "My spouse keeps me well informed about the Army"; daily coping is positively correlated with the soldier keeping the spouse more informed about the Army.
2. Caucasian: "The opportunity for me to achieve my personal goals"; as opportunities to achieve personal goals increased, daily coping improved.
3. Hispanic: "You and your spouse's satisfaction with your spouse's military job security/stability"; as satisfaction with job security increases, daily coping improves.
4. Caucasian and African American: "You and your spouse's satisfaction with the opportunity for your spouse to serve the country"; as satisfaction increases, daily coping increases.

For the above eight variables, it appears that ethnicity was an intervening variable in terms of whether the variables were statistically significant and how important they were in predicting daily coping. Therefore, ethnicity is considered an intervening variable because (1) the order of entry of the variables entering the regression models and the percentage of variance accounted for in the DCS scores varied based on ethnic groups, and (2) the variables that were predictors of daily coping varied by ethnic groups. Two variables—"the Army's concern for the family" and "how would you feel if your spouse were to make the Army a career"—entered into the aggregate model;

these variables were not selected for entry into the ethnically specific models. A summary of the findings for each ethnic group follows.

Caucasians. For the Caucasian sample of spouses, seven variables entered the model. Their order of entry was very similar to the first seven variables that entered the aggregate model (see Table 1) except for two variables (variables six and seven changed order from the aggregate model). The seven variables accounted for 32.9 percent of the variance in DCS scores, which is lower than the total percentage of variance accounted for by these variables for the two other ethnic groups. For the Caucasian and the aggregate sample, the PES scale was the first to enter the model. The PES accounted for the majority (24.5 percent) of the variance in DCS scores. The second variable to enter the Caucasian model was "I keep myself well informed about the Army." It accounted for 4.0 percent of the variance. The last variable to enter the model was "the demands of the Army on family members"; it only accounted for 0.2 percent of the variance in the DCS scores. The results suggest that the Caucasian model was reflective of the aggregate sample model since seven of the ten predictors for the aggregate model were included in the Caucasian model and the order of entry was very similar for both models. A similar percentage of variance was accounted for by the various variables in the aggregate and Caucasian models.

African American. Five variables were found to be statistically significant predictors of daily coping for African American spouses. The variables accounted for 43.8 percent of the variance in the DCS scores. This is a considerably higher level of variance accounted for than in the Caucasian model. All five variables had been included in the aggregate and Caucasian models. But the African American and Caucasian models differed on the order of entry of the variables into the models. The variable "You and your spouse's satisfaction with the opportunity for your spouse to serve the country" entered second for the African American model and fifth for the Caucasian model. The variable accounts for a larger percentage of the variance in the African American DCS scores, 7.3 versus 0.4 percent, than it did in the Caucasian model, which suggests that for African American spouses this variable is of greater importance than for Caucasian spouses. This reflects findings in the literature that the community is highly relevant to the African American family.[52,53]

Again, the PES scale was the first to enter the model and it accounted for the largest percentage (27.3 percent) of the variance in DCS scores. The last variable to enter the model was "the demands of the Army on family members." This variable accounted for 2.5 percent of the variance in the DCS scores. A clear difference exists in the findings for the African American and the Caucasian spouses on the "opportunity to achieve personal goals." For African Americans, this variable was not a significant predictor of daily coping, whereas for the Caucasian spouses, it was fourth in importance and accounted for 1.6 percent of the variance in DCS scores. The greater importance of this variable for Caucasian spouses may reflect the findings in

the literature that the American Caucasians have an individual orientation whereas African Americans have a collective orientation.[54]

Hispanic. Stepwise regression results for the Hispanic sample resulted in four variables being significant that were common to the other ethnic groups and one variable that was not shared with the other groups. The five variables accounted for 46.2 percent of the variance in the Hispanic DCS scores, which is similar to the African American sample but much higher than the Caucasian sample. Again, the PES scale was the first variable to enter the model and it accounted for the largest percentage (28.5 percent) of the variance in DCS scores. As in the Caucasian model, the second variable to enter the model was "I keep myself well informed about the Army." It accounted for 10.2 percent of the variance in DCS scores as compared to 4.0 percent for the Caucasian sample. This suggests that, although these variables entered the regression models at the same step, the larger percentage of variance accounted for in the Hispanic model by this variable indicates it is a more robust predictor of DCS scores for Hispanic than for Caucasian spouses. The last variable to enter the model was "You and your spouse's satisfaction with your spouse's military job security/stability" and it accounted for 1.2 percent of the variance in the DCS scores. In the Hispanic model, the variable "demands of the Army on family members" entered third, as compared to fifth in the African American and seventh in the Caucasian models. This probably reflects the Hispanic culture's high emphasis on family as emphasized in previous research.[55]

Summary: Ethnicity and daily coping. The four stepwise regression models varied in the number of variables that were selected to be entered into the models and the total amount of variance accounted for by the models. The aggregate sample model had ten variables that were selected for entry, and the variables accounted for 35.2 percent of the variance in the DCS scores; the Caucasian model had seven variables selected for entry, and they accounted for 32.9 percent of the variance; the African American model had five variables selected for entry, and they accounted for 43.8 percent of the variance; and the Hispanic model had five variables selected for entry, and they accounted for 46.2 percent of the variance in the DCS scores. The PES was the first variable to enter all models; it accounted for the largest percentage of variance in the DCS scores for all ethnic groups. The order of entry of subsequent variables differed according to the ethnic group and the percentage of variance accounted for in DCS scores also varied according to the ethnic group.

PES Analysis. Since the PES was the first variable to enter into all the above models and it accounted for a large percentage of the variance in the DCS scores, additional stepwise regressions were performed to determine how the five items in the PES individually were related to the DCS scores based on ethnicity. Four stepwise regressions were conducted: one for the aggregate sample and one for each of the three ethnic samples. Results of the analyses can be found in Table 2 below.

Table 2
Results of the Stepwise Regression for the Problems Experienced Scale Items and Ethnicity

Extent They Experienced the Following Problems in the Past Six Months	Combined (N = 2,928)	Caucasian (n = 2,182)	African American (n = 281)	Hispanic (n = 235)
Emotional or nervous problems	1 (15.7)	4 (1.1)	1 (20.8)	2 (6.5)
Financial problems	2 (6.2)	1 (15.5)	3 (1.7)	1 (21.9)
Parenting difficulty	3 (3.3)	2 (7.9)	2 (8.2)	n.s.
Marital problems	4 (0.7)	3 (2.1)	n.s.	n.s.
Job-related problems	5 (0.5)	5 (0.2)	n.s.	3 (3.5)

Note: n.s. = nonsignificant. Numbers indicate the step the variable entered the stepwise regression. Numbers in parentheses are the percentages of variance in DCS scores accounted for by the variables in stepwise regression.

The stepwise regressions indicated that two of the five items from the PES were common predictors for each of the ethnic samples and the aggregate sample. These two items were "the extent that they experienced financial problems in the last six months" and "the frequency of emotional or nervous problems in the last six months." These two variables also accounted for a significant amount of the variance in the DCS scores but the amount accounted for varied based on ethnicity. For the Hispanic sample, "financial problems" accounted for 21.9 percent of the variance, for the African American sample it accounted for 1.7%, and for the Caucasian sample 15.5%. "Emotional or nervous problems" accounted for 20.8% of the variance in the African American sample, 6.5% in the Hispanic sample, and 1.1% in the Caucasian sample. For both of these variables, ethnicity played an intervening role because the order of entry into the regression models and the percentage of variance accounted for varied based on ethnicity. The other three items varied on whether they were predictors of DCS scores based on ethnicity. The three items accounted for a lower percentage of the variance in the DCS scores (8.2 to 0.2 percent) than the first two variables. "Frequency of marital problems in the last six months" was a predictor for the aggregate and Caucasian sample, but not for the other ethnic groups. Frequency of parenting problems was significant for the aggregate, Caucasian, and African American samples, but not for the Hispanic sample of spouses. Frequency of job-related problems was significant for the aggregate, Caucasian, and Hispanic samples, but not the African American sample.

In summary, the Caucasian sample was again more reflective of the aggregate sample than the other ethnic groups, and for this sample all five items from the PES were predictors of DCS scores as they were for the aggregate sample. The African American and Hispanic samples had three predictor items, but only two were identical and they accounted for different amounts of variance in the DCS scores. It is possible that the

lower number of items being statistically significant predictors of DCS scores for the African American and Hispanic groups could be due to their lower sample size (and, therefore, lower statistical power) as compared to the Caucasian and aggregate samples.

Concluding Remarks

This exploratory study was designed to assess whether a spouse's ethnicity might be an intervening variable that modifies how other variables such as age, marital satisfaction, financial problems, parenting problems, emotional problems, level of education, social support, and so on affect how well female Army spouses with children coped with the stresses of daily living. Study findings indicated that for the ten variables that were statistically significant predictors of daily functioning (DCS scores), ethnicity was probably an intervening variable either because it affected the step a variable enters the stepwise regression, or it impacted the amount of variance the variable accounts for in DCS scores, or it determined whether the variables entered the model. This also held true for the five items of the PES.

Results from this exploratory study suggest that the ethnically specific characteristics of spouses should possibly be considered in the design, delivery, and targeting of support programs as Lasater et al.,[56] Lee et al.,[57] and Saha et al.[58] recommended. The common findings suggest that program developers should address the following challenges that are common to all ethnic groups and control for more of the variance in spouse daily coping scores:

1. Emotional/nervous problems of the spouses
2. Financial problems of the families
3. Parenting difficulties within the families
4. Marital problems
5. Job-related problems of the spouse
6. Helping the spouse to keep himself or herself informed about the Army
7. Ensuring the soldier keeps his or her spouse informed about the Army
8. Making commanders aware that the demands the Army places on the family will have an impact on the daily functioning of the military spouse

These findings support previous military research that found that financial issues,[59] parenting issues,[60] and marital adjustment[61] affect military family functioning. The findings also agree with previous research that demonstrated the importance of both the soldier and the spouse ensuring that the spouse knows about Army services and programs available to them both during periods of deployment as well as nondeployment.[62]

The study findings provide additional clarification on the unique ethnic issues associated with family functioning and suggest that the ethnicity of the spouse should be taken into account in making program decisions. It appears that coping with life by African American spouses with children is affected by the frequency of emotional

problems they are experiencing and their belief that their spouse can have a secure and stable career in the military and their spouse's Army career will make a positive contribution to society. Military leaders might emphasize these issues if they wish to enhance African American spouse coping. Providing programs to assist the African American spouse in dealing with emotional and financial problems are also important.

When dealing with Hispanic spouses with children, Army leadership and program developers should be sensitive to how their decisions affect family well-being and the spouse's ability to maintain a close support group. Financial and job-related problems are also possible sensitive areas for Hispanic spouses.

For Caucasian spouses with children, it maybe important to provide opportunities to fulfill their career goals, help them to keep informed about Army issues, encourage them to have a local support network, and provide them support in dealing with financial issues. These recommendations, and others based on the ethnically specific findings of this study, can assist the Army and military family service agencies in becoming more culturally competent. As the National Mental Health Information Center noted, "becoming a culturally competent agency is a dynamic process that requires cultural knowledge and skill development at all service levels, including policymaking, administration, and practice."[63]

When considering the above conclusions, it is important to keep in mind a number of limitations of this study. First, the study is an exploratory study using a convenient, preexisting sample. Therefore, it is possible important ethnic variables that should be examined such as spirituality and the amount of discrimination experienced by families of color were not included in this study. Second, sample sizes for the African American and Hispanic spouses with children were small and may not be representative of the Army population for these ethnic groups. Third, because the study design is descriptive and correlational, one can only suggest that there are correlational, not causal, relationships between the related variables and spouse daily coping. Fourth, because the SAF IV data for this study were collected pre-9/11, they may not be representative of how Army spouses are coping subsequent to that time. Fifth, the study did not include data from male military spouses; therefore, one cannot generalize study findings to this population. Sixth, it is likely the opinions of the junior enlisted and ethnic minorities were underrepresented due to higher return rates of officer's spouses and Caucasian spouses. Finally, the SAF IV response rate of 33 percent might impact the representativeness of the sample.

Despite these limitations, the preliminary findings on spouse ethnicity warrant additional study and consideration by Army staff. The ethnic diversity of the Army community continues to increase, and the importance of Army family coping, especially during a time of war, remains critical. As soon as they become available, more robust data sets should be used to explore what appears to be an important and fruitful area. Future studies in the area of coping and Army spouse ethnicity should include samples of male spouses and females spouses who do not have children to determine whether findings differ for these groups.

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